## SARDAR PATEL UNIVERSITY Programme: M.Sc (Home Science) Subject: Family Resource Management Semester: II Syllabus with Effect from: June - 2013

## Paper Code: PH02CFRM02 Title Of Paper: Residential & Institutional Appliances

Total Credit: 4

Unit	Description in detail	Weightage (%)
Ι	Basic components in An Appliance	
	Mains Cord	
	Switches – Power/Mode/Speed Selection	
	Plugs And Sockets	
	Controls – Thermostats	
	Interlock	
	Light-Bulbs	
	Indicators –Incandescent/Neon/Lcd	
	Heating Elements	
	Solenoids-Resistors/Capacitor/Diodes.	
	Small Electronic Components	
	Motors-Universal/Induction/DC/Timing.	
	Fans and blowers- bladed/centrifugal	
	Bearing & Bushings	
	Mechanical controllers- Time Motors/Cam Switches.	
	Electronic Controllers – Simple Delay Microprocessor Based.	
	Batteries-Alkaline/Lithium/Lead Acid Etc.	
	AC Adapter/Charges.	
	Product Testing for Quality.	
	Need for Testing	
	Institutions offering test facilities-	
	BIS, IDEMI.RTC, ERTL, PTH, NTH Etc.	
	Types of test- safety test, environmental test, physical test/Electrical	
	endurance and performance test.	
	Equipments required for testing of electrical appliances.	
II	Safety Against Household Appliances	
	Definition of safety	
	Safety technology"	
	Classification of safety- inherent technical safety, Operational safety/ Actual	
	safety.	
	Electrical shock and its prevention.	
	What is an electric shock?	
	Potential sources of electrical shock	
	Causes of electrical shocks	
	Factors determining the severity of electric shock.	
	Protection against electric shock.	
III	Selection criteria for Residential and Institutional Appliances.	
111	Design, portability, finishes, budget, use, installation requirements and	
	maintenance required.	
	Safety at work and while arranging appliances.	
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IV	Recent Trends in Appliances:	
	Recent developments and new technology in residential and institutional	
	appliances.	
	Evaluation of electrical and motor appliances in terms of speed, control,	
	performance, time and energy saving features, noise produced etc.	
V	Researches need in residential and institutional appliances -	
	past, present and future of research in residential and institutional appliances	
	Institutions helping in researches and preserving trends.	

## Basic Text & Reference Books:-

- Avery, M. (1955): Household Physics, Macmillan Co, New York
- Allison, A. (1966): Running your Home and Equipment: Design for Living, Series No. 6, Mills and Boon Ltd., London.
- Beveridge, E.(1965): Choosing and Using your Home Equipment, Iowa State University Press, Ames.
- Ehrencram and Inman, (1966): Equipment in the House, 2<sup>nd</sup> Edition, Harps Row Publisher, New York.
- > Johnson B.J.(1970): Equipment for Modern Living, Macmillan Co, New York
- Peet, L.J., Picket, M.S. and Arnold M.G. (1962): Household Equipment, 7<sup>th</sup> Edition, John Wiley and Sons Inc.
- > Peet, L.J., and Young, H.(1958): Home Equipment Guide, Iowa State University Press, Ames
- Wilson, P. (1981): Household Equipment Selection and Management, Houghton Miflan Co, Boston
- ▶ Wileland, L.H.L.: At Work in the Kitchen, 2<sup>nd</sup> Ed, D.Van Nortrand CO. Inc., New York
- ➤ Van Zante H. (1970): Household Equipment Principles, Prentice Hall, New York
- Adams, J.T.(1981): How to Buy and Maintain Home Systems and Appliances, Arco Publishers Inc., New York
- Anderson, E., Andels, P. (1976) : Home Appliances Servicing, Taraporwala Sons & Co. Ltd., Bombay.
- NCERT (1987): exemplor Instructional Material for Pre vocational course under work experiences on repair and maintenance of household electrical appliances- Instruction Cum Practical Manual Classes IX & X, NCERT, New Delhi
- Varghese, M.A. et al (1985): Household Equipment Manual, S.N.D.T. Women's University, Mumbai.

